



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/726,702

12/04/2003

Delmar Eugene Blevins

SVL920030072US1

9001

45727

7590

03/20/2007

IP AUTHORITY, LLC

RAMRAJ SOUNDARARAJAN

9435 LORTON MARKET STREET #801

LORTON, VA 22079

EXAMINER

BELL, CORY C

ART UNIT

PAPER NUMBER

2164

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

03/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/726,702

Applicant(s)

BLEVINS ET AL.

Examiner

Cory C. Bell

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



**SAM RIMELL
PRIMARY EXAMINER**

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-31 have been examined.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 10, 20, and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims contain the new limitation of using separate networks, however the specification only enables having separate network connections.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. The following claims are rejected under 35 USC 112 2nd paragraph: 2, 3, 13, 14, 16, 19, 20, and 21.
3. **Claim 2** is rejected because the relationships between “a COMMIT,” “a ROLLBACK,” and “a corresponding entry” and there recitations in steps c and b respectively of claim 1 are unclear.

Art Unit: 2164

4. **Claim 3** is rejected because the relationships between “a COMMIT,” “a ROLLBACK,” “a RECOVER decision” and “a corresponding entry” and their recitations in steps c and b respectively of claim 1 are unclear.
5. **Claim 13** is rejected as it contains errors similar to those in claim 2. See above.
6. **Claim 14** is rejected as it contains errors similar to those in claim 2. See above.
7. **Claim 16** is rejected because the relationship between “code inserts an entry in said relational table” to the previous recitation in claim 12 is unclear.
8. **Claim 19** is rejected as it contains uncertainties similar to those in claim 2. This claim is still optionally recited and thus not limiting. See Above.
9. **Claim 21** is rejected as it contains uncertainties similar to those in claim 3. This claim is still optionally recited and thus not limiting. See Above.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. Claims 1-31 are rejected under 35 USC 101.
11. Claims 1-31 refer to software for performing a method, as the code itself is not executed, no useful concrete and tangible result can occur. Secondly, the software is not embodied on a tangible medium, thus if a result was produced it would not be tangible. Last, the software itself has no code for providing a useful result even if the code was to be executed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 6-9, 14, 16-19, 21, 24-26, and 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6873995, known hereafter as Benson.

12. *As per Claim 1,*

A method implementing a robust 2-phase commit protocol between a client and a server via a relational table and software facilitating communications with said client and said server, said relational table storing a list of potentially indoubt units of work, said method as implemented in said software comprising the steps of: (a) receiving an invocation from said client for a first phase of commit for a transaction representing a unit of work; (Figure 1)(b) inserting an entry in said relational table corresponding to said unit of work and transmitting an instruction to said server to prepare to commit for said transaction, said inserted entry indicating said unit of work is potentially an indoubt entry (Col 6 lines 12-29); and (c) receiving a request from said client to perform any of the following decisions: a COMMIT, a ROLLBACK(Col 9 lines 1-5), or a RECOVER, wherein said relational table is updated after execution of said request.

13. *As per Claim 2,*

2. A method as per claim 1, wherein, if said received request is a COMMIT or a ROLLBACK

Art Unit: 2164

decision, said method comprising the steps of: communicating with said server and processing said COMMIT or ROLLBACK request, and upon successful processing, deleting a corresponding entry in said relational table. (Col 9 lines 1-5)

14. *As per Claim 3, Claim 3 is rejected under the same grounds as claim 1 as the request is not a Recover decision. It is also noted the Recover decision is an XA Recover as defined in the specification and is thus inherently part of the reference as the reference can be XA compatible*(Col 10 lines 8-13)

3. A method as per claim 1, wherein, if said received request is a RECOVER decision, said method comprising the steps of: querying said relational table to identify a list of indoubt units of work; transmitting said list of indoubt units of work to said client; receiving a COMMIT or ROLLBACK decision from said client; communicating with said server to process said commit or rollback request, and upon successful processing, deleting a corresponding entry in said relational table.

15. *As per Claim 6,*

6. A method as per claim 1, wherein said relational table is a SQL table and said step of inserting an entry in said relational table is performed via issuing a SQL INSERT instruction(Col 6 lines 13-29).

16. *As per Claim 7,*

7. A method as per claim 1, wherein said relational table is stored in said server and a request for said insertion of entry in said relational table is placed on a network message that includes said instruction to said server to prepare to commit for said transaction.(Col 4 lines 2-39)

Art Unit: 2164

17. *As per Claim 8,*

8. A method as per claim 1, wherein said method is implemented across networks. (*Figure 1, col 13 line 43*)

18. *As per Claim 9,*

9. A method as per claim 8, wherein said across networks element comprises any of, or a combination of, the following: local area network (LAN), wide area network, wireless network, or the Internet(col 13 line 43).

19. *As per Claim 11,*

11. A method as per claim 1, wherein said method comprises the step of mapping said 2-phase protocol onto a protocol supported by said server.(Col 4 lines 8-13)

20. *As per Claim 12,*

See Claim 1 rejection above.

21. *As per Claim 13,*

See Claim 2 rejection above.

22. *As per Claim 14, Claim 14 is rejected under the same grounds as claim 12 as the request is not a Recover decision. Which according the specification is what invokes this process. It is also noted the Recover decision is an XA Recover as defined in the specification and is thus inherently part of the reference as the reference can be XA compatible (Col 10 lines 8-13)*

23. *As per Claim 16,*

24. *See Claim 6 rejection.*

25. *As per Claim 17,*

26. *See Claim 7 rejection.*

Art Unit: 2164

27. *As per Claim 18,*

See Claims 1 and 6 rejections and (Col 6 lines 13-29).

28. *As per Claim 19,*

See Claim 2 rejection. The delete instruction is inherently an SQL DELETE function as it is on a relational table.

29. *As per Claim 21,*

30. See Claim 3 rejection.

31. *As per Claim 24,*

See Claim 8 Rejection.

32. *As per Claim 25,*

See Claim 9 rejection.

33. *As per Claim 26,*

Software implementing a 2-phase commit protocol between a client and a server comprising: a first module invoked to create a relational table in said server to store potential indoubt units of work; a second module invoked to insert or delete indoubt entries of work in said relational table, wherein insertions of indoubt entries are performed if an invocation is received from said client for a first phase of commit for a transaction representing a unit of work;(See Claim 1 rejection) and wherein deletions of indoubt entries are performed upon successful processing of a commit or rollback decision;(See Claim 2 rejection) and a third module invoked upon receiving a recover instruction from said client, said third module extracting a list of indoubt units of work from said relational table and transmitting said extracted list to said client, wherein said client inspects said list and issues a commit or rollback decision to said middleware regarding said indoubt units of

Art Unit: 2164

work in said list. (This is inherently part of the XA protocol that can be part of this invention, see col 4 lines 8-13, being that the recover command is an XA Recover as disclosed in the specification of the instant application and is taught in the XA specification Page 47)

34. *As per claim 29,*

See Claim 6 rejection.

35. *As per claim 30,*

See Claim 7 rejection.

36. *As per claim 31,*

See Claim 11 rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, 10, 15, 20, 22, 23, and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benson pre grant published Oct 23, 2003 as US 2003/0200212 in view of official notice.

37. *As per claims 4 and 27,* Benson teaches there being multiple servers in col 4 lines 4-13, however Benson fails to expressly disclose still being able to support a recover decision even if one of the servers. The examiner takes official notice that cluster failover was well known in the art at the time of the invention. Thus it would have been obvious to one of ordinary skill in that art to include a failover system when implementing a cluster, so that when one node failed the

Art Unit: 2164

whole system would not crash, thus allowing the recover decision to be processed even after a server failure.

38. *As per claims 5, 15, 23, and 28*, Benson col 6 line 65 – col 7 line 5 teaches using a table level lock to keep contention to a minimum, however Benson fail to expressly disclose using row-level locking. The examiner takes official notice that row-level locking was well known in the art at the time of the invention. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use row level locking in place of table level locking as it allows for more flexibility, ie not having to lock a whole table to lock one row.

As per Claims 10, 20, and 22 Benson teaches requests for deletions of entries in said relational table are placed on a separate network connection to avoid starting a new unit of work.(Col 4 lines 53-57) However, Benson fails to expressly disclose the connections being on separate networks. However, the examiner takes official notice that it was well known in the art at the time of the invention to be connected to servers on different networks. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to include this limitation as is provides several advantages known to one of ordinary skill in the art at the time of the invention, for example the division on the communication load.

Response to Arguments

Applicant's arguments filed 2/19/2006 have been fully considered but they are not persuasive. Any rejections not repeated have been withdrawn.

Art Unit: 2164

With regards to applicants arguments to the rejections made under 35 USC 112 2nd paragraph. The applicants arguments with regards to “a COMMIT” “a ROLLBACK” and “a corresponding entry” the applicants argument are not persuasive as the relations ship between these elements and the previous recitations are not clear, i.e. its not clear if they are intended to refer to the same of different elements from there initial introductions. Second the issues with claim 16 were not addressed.

With regards to the rejection Under 35 USC 101, the applicant’s arguments are not persuasive. Applicant’s arguments fail to address the lack of production of a useful, concrete and tangible, result. *See MPEP 2106 The claimed invention as a whole must >be useful and< accomplish a practical application. That is, it must produce a “useful, concrete and tangible result.” State Street, 149 F.3d at *1373-74<, 47 USPQ2d at 1601-02.* Additionally, applicant is still only claiming software in claims 1-11, and 18-31.

With regards to the rejections under 35 USC 102(e) the applicants arguments are not persuasive. Applicant argues the prior art is deficient in teaching “inserting an entry in said relational table corresponding to said unit of work and transmitting an instruction to said server to prepare to commit for said transaction, said inserted entry indicating said unit of work is potentially and indoubt entry.” The applicants first argument is that the reference has two tables, however not only is it abundantly clear that these two tables are a two level hierarchy that make up one table, the library server tracking table, but applicants claim is read on by either of these tables having the entry, as the prior art is not disqualified for having additional elements over applicants claim is it is in the form of “comprising.” Next, applicant asserts the prior art is silent to indoubt entry but and entry referring to a non-committed transaction is an indoubt entry. See

Art Unit: 2164

Col 7 lines 15-35 for further proof. The rest of Applicant's arguments with respect to the interpretation of the claims fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Last, Applicant asserts that Benson is not applicable for use under 35 USC 103. This statement is incorrect, as the specification was previously published on Oct. 23, 2003 and would thus qualify under 102(a) and is thus not disqualified by 35 USC 103(c).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2164

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cory C. Bell whose telephone number is (571) 272 2736. The examiner can normally be reached on m-f 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272 4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


SAM RIMELL
PRIMARY EXAMINER